Custodial, Labor and Trades Branch Maintenance and Plant Operation Group Water Series

E.P.W.U. WATER PLANT TECHNICIAN II

4/99 (SAC)

Summary

Under general supervision, supervise activities of a crew engaged in operation and/or maintenance of a water treatment plant.

Typical Duties

Oversee shift operations and direct lower level staff in controlling routine water treatment processes in compliance with state and federal permits. Involves: monitoring operations through successive stages of water treatment, including carbonation, fluoridation, chlorination or other processes; monitoring and taking appropriate corrective action to assure proper operation of gauges, meters, pumps, motors, chemical feeders, automatic control devices or other equipment; checking water for turbidity, odors, alkalinity, chlorine residual and other requirements to assure compliance with water quality regulations; maintaining proper water levels in tanks and drawing water from wells or canal as needed; monitoring laboratory tests of water and assuring samples are taken and tested in accordance with Federal and state regulations; making adjustments to chemical additives according to established guidelines.

Coordinate and perform installation, maintenance and repair of treatment systems and complex equipment. Involves: assisting in planning and directing repair of pumps, motors, aeration systems, chlorinators, chlorine dioxide generators, multiple chemical feeders or similar mechanical equipment; inspecting machinery for proper operation and to detect faulty parts; replacing bearings, sleeves, packing glands, oil columns, pumps, housings, shafts, spider bearings, pump bowls, or similar parts using hand tools; checking electrical equipment for shorts, faulty wiring, loose connections, loss of power and overload; performing minor electrical or mechanical repairs including basic welding; performing plumbing tasks such as installing valves and meters on water lines; scheduling and performing required preventive maintenance; installing fire sprinkler systems and meters.

Supervise assigned personnel. Involves: scheduling, assigning, instructing, guiding, checking and evaluating work; arranging for or engaging in employee training and development; enforcing personnel rules and regulations, standards of conduct, work attendance, and safe working practices; counseling, motivating and maintaining harmonious working relationships among subordinates; recommending staffing and employee status changes; interviewing applicants and recommending selection.

Perform other duties as assigned. Involves: substituting for supervisor during temporary absences by carrying out specifically delegated duties sufficient to sustain continuity of ordinary operations or services, and similarly substituting for coworkers; preparing and maintaining daily and monthly equipment and process logs, power records, chemical and gas consumption and other related records and reports using computers; maintaining inventory and requisitioning supplies.

Minimum Qualifications

<u>Training and Experience</u>: Graduation from high school or G.E.D. and five (5) years experience in water or wastewater treatment plant operations or maintaining and repairing mechanical equipment, which includes three (3) years at a level comparable to Plant Technician I in a water treatment plant; or an equivalent combination of training and experience.

Knowledge, Abilities and Skills: Considerable knowledge of: principles practices and procedures used in operation, maintenance and repair of a water treatment plant; safe work practices and procedures. Good knowledge of: operation and maintenance of a variety kinds of water treatment equipment including aeration systems, chlorinators, chlorine dioxide generators, multiple chemical feeders; water treatment chemicals and compounds such as those used in fluoridation, chlorination or other processes; Federal, State and local rules and regulations governing water treatment plant processes and water quality. Some knowledge of supervisory practices and procedures.

Ability to: plan, layout and complete installation, modification and repairs of water treatment plant equipment; read and interpret technical manuals, blueprints and other documents used to install, adjust and set various meters, gauges, and similar devices; read and record data from gauges, graphs, dials and other measuring instruments; calculate chemical formulas and estimates of required labor and materials costs; plan, assign, supervise, train, review and evaluate the work of assigned personnel; enforce and comply with personnel rules and regulations, standards of conduct and work attendance and safe working practices and procedures; express oneself clearly and concisely, both orally and in writing; establish and maintain effective working relationships with fellow employees; maintain records and prepare reports.

Skill in the safe use and care of: common hand tools and instruments to sample and measure water quality.

Physical Requirements: Occasional lifting and carrying of moderately heavy objects (up to 50 pounds); exposure to chemicals or similar solutions; operating a motor vehicle through City traffic and working under all weather conditions.

Special Requirements: Work a rotating shift schedule including weekends and holidays.

License and Certificates: Texas Class "C" Driver's License; Texas "B" Water Certificate of Competency by time of appointment.

